

AMENDMENTS TO THE CLAIMS

1. (previously presented) A method for producing a pigment, comprising:

a) adding a phosphorus compound to an aqueous suspension of titanium dioxide base material,

then

b) adding a titanium compound; and

c) adding an aluminum compound,

wherein no significant amount of zirconium compound is or has been added to the aqueous

suspension of titanium dioxide base material; and then

d) adjusting the pH value of said suspension to a value of from 8 to 10; and then

e) adding a magnesium compound.

2. (Canceled)

3. (Original) The method of claim 1, wherein the added phosphorus compound is an inorganic phosphorus compound.

4. (currently amended) The method of claim 3 ~~claim 1~~, wherein the inorganic phosphorus compound is selected from the group consisting of alkali phosphates, ammonium phosphates, polyphosphates, and phosphoric acid.

5. (Original) The method of claim 1, wherein the added phosphorus compound is 0.4 to 6.0% by weight calculated as P_2O_5 , referred to TiO_2 base material in the suspension.

- 1 6. (Original) The method of claim 5, wherein the added phosphorus compound is 1.0 to 4.0%
2 by weight, calculated as P_2O_5 , referred to TiO_2 base material in the suspension.
- 1 7. (Original) The method of claim 6, wherein the added phosphorus compound is 1.6 to 2.8%
2 by weight, calculated as P_2O_5 , referred to TiO_2 base material in the suspension.
- 1 8. (Original) The method of claim 1, wherein the titanium compound added is a hydrolyzable
2 titanium compound.
- 1 9. (Original) The method of claim 8, wherein the titanium compound added is selected from the
2 group consisting of titanyl sulphate and titanyl chloride.
- 1 10. (Original) The method of claim 8, wherein the quantity of titanium compound added is 0.1
2 to 3.0% by weight, calculated as TiO_2 , referred to TiO_2 base material in the suspension.
- 1 11. (Original) The method of claim 10, wherein the quantity of titanium compound added is
2 0.1 to 1.5% by weight, referred to TiO_2 base material in the suspension.
- 1 12. (Original) The method of claim 11, wherein the quantity of titanium compound added is
2 0.1 to 1.0% by weight, calculated as TiO_2 , referred to TiO_2 base material in the
3 suspension.
- 1 13. (Original) The method of claim 1, wherein the quantity of titanium compound added is 0.1
2 to 1.0% by weight, calculated as TiO_2 , referred to TiO_2 base material in the suspension.
- 1 14. (Original) The method of claim 1, wherein the aluminum compound added is alkaline.

1 15. (Original) The method of claim 14, wherein the alkaline aluminum compound is selected
2 from the group consisting of sodium aluminate, alkaline aluminum chloride, and alkaline
3 aluminum nitrate.

1 16. (Original) The method of claim 14, further comprising
2 d) adjusting the pH value of the suspension to a value of from 8 to 10 after step c).

1 17. (Original) The method of claim 1, wherein the aluminum compound added is acidic.

1 18. (Original) The method of claim 17, further comprising:

2 d) adjusting the pH value to a value between 8 and 10 by adding an alkaline aluminum
3 compound.

1 19. (Original) The method of claim 17, further comprising:

2 d) adjusting the pH value to a value between 8 and 10 by adding an alkaline aluminum
3 compound in combination with a base.

1 20. (Original) The method of claim 1, wherein during the addition of the aluminum compound,
2 the pH value of the suspension is maintained constant in the range from 2 to 10 by the
3 simultaneous addition of a pH modifying compound.

1 21. (Original) The method of claim 20, wherein during the addition of the aluminum compound,
2 the pH value of the suspension is maintained constant in the range from 4 to 9 by the
3 simultaneous addition of a pH modifying compound.

1 22. (Original) The method of claim 21, wherein during the addition of the aluminum compound,

the pH value of the suspension is maintained constant in the range from 6 to 8 by the simultaneous addition of a pH modifying compound.

23. (Original) The method of claim 1, wherein the total quantity of the aluminum compounds added is 2.0 to 7.5% by weight, calculated as Al_2O_3 , referred to TiO_2 base material

24. (Original) The method of claim 23, wherein the total quantity of the aluminum compounds added is 3.5 to 7.5% by weight, calculated as Al_2O_3 , referred to TiO_2 base material.

25. (Canceled)

26. (previously presented) The method of claim 1, wherein the magnesium compound added is selected from the group consisting of magnesium sulphate and magnesium chloride.

27. (previously presented) The method of claim 1, wherein the quantity of magnesium compound added is 0.1 to 1.0% by weight, calculated as MgO , referred to TiO_2 base material in the suspension.

28. (Original) The method of claim 27, wherein the quantity of magnesium compound added is 0.2 to 0.5% by weight, calculated as MgO , referred to TiO_2 base material in the suspension.

29. (previously presented) The method of claim 1, further comprising

f) treating the pigment with an added material in order to influence the final pH value of the suspension wherein the final pH value of the pigment is controlled by the pH and the quantity of the added material.

30. (Original) The method of claim 29, where the added material is a nitrate compound.

1 31. (Original) The method of claim 30, where the finished pigment contains up to 1.0% by
2 weight NO₃.

1 32. (canceled)

1 33. (canceled)

1 34. (Original) The method of claim 1, where the titanium dioxide base material is milled before
2 step a).

1 35. (Original) The method of claim 34, where the titanium dioxide base material is wet-milled
2 and where a dispersant is added during milling.

1 36-39. (canceled)

1 40. (previously presented) A material, comprising;

2 a titanium dioxide pigment material; the titanium dioxide comprising TiO₂ particles, each particle
3 having a surface;

4 phosphorus containing material attached to the surface of each particle;

5 titanium containing material additional to the titanium dioxide material of the surface attached to
6 the phosphorus containing material; and

7 aluminum containing material attached to the titanium containing material additional to the
8 titanium dioxide material of the surface, and;

9 magnesium containing material attached to the aluminum containing material.

1 41. (Canceled)

1 42. (previously presented) The material of claim 40, further comprising;

2 nitrate containing material attached to the aluminum containing material.

1 43.(previously presented) The material of claim 40, further comprising;

2 nitrate and magnesium containing material attached to the aluminum containing material.

1 44.(previously presented) The material of claim 40 , wherein the resultant particles contain an
2 insignificant amount of zirconium.

1 45. (previously presented) The material of claim 40 , wherein the titanium dioxide pigment
2 material is incorporated into a decorative laminated paper.

1 46. (canceled)

1 47. (previously presented) The material of claim 40, wherein the titanium dioxide pigment
2 material is incorporated into a decorative laminated paper.

1 48. (previously presented) The material of claim 42, wherein the titanium dioxide pigment
2 material is incorporated into a decorative laminated paper.

1 49. (previously presented) The material of claim 43, wherein the titanium dioxide pigment
2 material is incorporated into a decorative laminated paper.

1 50. (previously presented) The material of claim 44, wherein the titanium dioxide pigment
2 material is incorporated into a decorative laminated paper.

1 51. (Canceled)

1 52. (previously presented) A method for producing a pigment, comprising:

2 a) adding a phosphorus compound to an aqueous suspension of titanium dioxide base material,
3 then

4 b) adding a titanium compound; and

5 c) adding an acidic aluminum compound wherein no significant amount of zirconium compound
6 is or has been added to the aqueous suspension of titanium dioxide base material; and then

7 d) adjusting the pH value of said suspension to a value of from 8 to 10; and then

8 e) adding a magnesium compound.

1 53. (previously presented) The method of claim 52, further comprising:

2 f) adjusting the pH value to a value between 8 and 10 by adding an alkaline aluminum
3 compound.

1 54. (previously presented) The method of claim 52, further comprising:

2 d) adjusting the pH value to a value between 8 and 10 by adding an alkaline aluminum
3 compound in combination with a base.

- 1 55. (previously presented) A method for producing a pigment, comprising:
- 2 a) adding a phosphorus compound to an aqueous suspension of titanium dioxide base material,
- 3 then
- 4 b) adding a titanium compound; and
- 5 c) adding an aluminum compound, and then
- d) adding a magnesium compound.

- 1 56.(previously presented) The method of claim 55, wherein the magnesium compound added is
- 2 selected from the group consisting of magnesium sulphate and magnesium chloride.

- 1 57. (previously presented) The method of claim 55, wherein the quantity of magnesium
- 2 compound added is 0.1 to 1.0% by weight, calculated as MgO, referred to TiO₂ base
- 3 material in the suspension.

- 1 58. (previously presented) The method of claim 57, wherein the quantity of magnesium
- 2 compound added is 0.2 to 0.5% by weight, calculated as MgO, referred to TiO₂ base
- 3 material in the suspension.

- 1 59. (previously presented) The method of claim 55, further comprising
- 2 c) treating the pigment with an added material in order to influence the final pH value of the
- 3 suspension wherein the final pH value of the pigment is controlled by the pH and the
- 4 quantity of the added material.

- 1 60. (previously presented) The method of claim 59, where the added material is a nitrate

2 compound.

1 61. (Previously presented) The method of claim 60, where the finished pigment contains up to
2 1.0% by weight NO_3 .